



STATE OF WASHINGTON
PUGET SOUND ACTION TEAM
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November 6, 2006

Mr. Jim La Spina
Washington Department of Ecology
Water Quality Program
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Mr. La Spina:

Thank you for the opportunity to comment on the "Preliminary Draft Industrial Stormwater General Permit" dated 10/9/06. I am submitting these comments in my role as director of the Puget Sound Action Team staff rather than as the chair of the multi-agency Puget Sound Action Team partnership.

Stormwater runoff is one of the leading causes of water pollution in urban areas of Puget Sound. The Governor's Salmon Recovery Office and the Puget Sound Salmon Recovery plan have both cited stormwater as one of the factors limiting recovery of salmonids listed as threatened under the Endangered Species Act. Recently, NOAA Fisheries scientists have undertaken studies to determine the causes of very high percentages (75% and higher) of otherwise healthy coho salmon dying in Seattle urban creeks before they are able to spawn. The scientists' leading hypothesis is that stormwater is a significant contributor to the problem.

NOAA Fisheries scientists have also studied the adverse effects of copper on the olfactory systems of juvenile coho salmon and have found that "short-term influxes of copper to surface waters may interfere with olfactory-mediated behaviors that are critical for the survival and migratory success of wild salmonids." Copper is commonly found in urban stormwater discharges.

Scientists contributing to the Puget Sound Assessment and Monitoring Program have found that English sole residing in urban areas of the Sound have much higher incidences of liver lesions on their livers than their counterparts found in less urban areas. Scientists believe that PAHs may be causing the cancers. PAHs are often found in high levels of urban stormwater runoff.

Given the magnitude and seriousness of these and other problems caused by stormwater in the basin, this permit is critical in our region's ability to mitigate harm from stormwater.

We support several aspects of this preliminary draft of the permit, including: sampling of discharges, sampling locations specified, use of the department's stormwater manuals for selection of BMPs, compliance with water and sediment quality standards, graduated action levels, inspections, and reporting.

We do have several concerns regarding the current draft of the permit. Specifically, we are concerned that:

- 1) Benchmarks and numeric action levels are carried over from the existing permit rather than using the stronger benchmarks and numeric action levels that were proposed by the consultant who evaluated extensive monitoring data from the existing permit.
- 2) The permit expresses two separate triggers for water quality violations: the benchmark, and an "action level" standard. These two standards each trigger different actions. We recommend that Ecology adopt a single numeric benchmark for a water quality exceedance. Once that benchmark is triggered, certain actions must be taken to address the exceedance. If those actions do not address the exceedance, then the permit should describe a set of further actions that will need to be taken to address the exceedance. The current two trigger approach is confusing to both the permittee and the public.
- 3) The four action levels contained in S8, while requiring investigations, reports and BMPs, also appear to allow permittees to continue to discharge stormwater throughout the life of the permit, despite repeated exceedances of numeric benchmarks that the department states should be met to protect water quality.
- 4) The consultant's water quality based risk analysis is based on dilution factors of the discharge in receiving waters, but the consultant did not characterize the volume or flow of permittees' discharges or that of receiving waters. This makes it difficult to know if dilution factors will be met in receiving waters.

Our most fundamental question about this preliminary draft permit is this: *Will this current preliminary draft permit move us forward sufficiently to be able to achieve the Governor's goal of a healthy and thriving Puget Sound by 2020?* I hope that as you work towards a final version of the permit, you seek to answer this question affirmatively.

Attached you will find more detailed comments from our agency. Again, thank you for your work on this important issue and the opportunity to comment. If you have questions on these comments, please contact Bruce Wulkan, the PSAT Program Manager for stormwater and combined sewer overflows, at (360) 725-5455 or at bwulkan@psat.wa.gov.

Sincerely,



Brad Ack
Director

**Detailed Comments on the Preliminary Draft Industrial Stormwater General Permit
Submitted by the Puget Sound Action Team**

The following specific comments are divided into two parts: Areas of concern and other comments.

Areas of Concern

- We are concerned that the preliminary draft permit reissuance carries over benchmarks and numeric action levels from the existing permit rather than using the stronger benchmarks and numeric action levels that were proposed by the consultant (Herrera) who evaluated extensive monitoring data from the existing permit.

Reissuance of NPDES permits should include improvements upon previous permits as additional information and BMPs become available. On October 10, 2006 staff from Herrera Environmental Consultants presented their recommendations for benchmarks and action levels for the reissued permit after analyzing years of monitoring data from the existing permit. Herrera staff recommended lowering benchmarks and action levels for 8 of 9 parameters (thereby strengthening the permit) and stated that the benchmarks and action levels in the current permit (based on EPA guidance) may not be applicable to Washington state. Herrera further commented that use of the proposed new targets may even become “overly conservative as treatment technology improves.” We are concerned that use of the benchmarks and action levels from the existing permit might lead to continued degradation of receiving waters and harm to biological resources.

We urge the department to use the more stringent numeric targets for benchmarks and action levels that were proposed by the department’s consultant.

- We are concerned about inconsistencies in S8, Corrective Actions. Only Action Level 1 uses the numeric *benchmarks* to trigger action – Action levels 2, 3, and 4 rely on less stringent numeric *action levels* (higher targets). Yet the permit glossary defines “benchmark” as the threshold above which water quality violations may occur. If water quality violations may occur if benchmarks are exceeded, then shouldn’t exceedance of the benchmarks, and not the higher target “action levels,” spur additional actions that will address exceedances?

By using “action levels” rather than “benchmarks” for Action levels 2-4, permittees may continue to exceed benchmarks for several parameters – and degrade water quality and harm biological resources – yet never trigger the higher action levels. This might continue for an entire permit cycle (5 years) yet the permittee would remain in compliance with the permit. This appears inconsistent with section S10A that states that permittees may not cause a violation of water quality, sediment quality and human health standards.

We therefore urge the department to either a) use exceedance of benchmarks, rather than action levels to spur further BMPs and other actions; or b) lower the numeric

benchmarks, adjust the action levels to where the benchmarks currently are, and use the adjusted action levels as trigger points for additional BMPs and other actions.

- We are concerned that the four action levels contained in S8, while requiring worthy investigations, reports and BMPs, also appear to allow permittees to continue to discharge stormwater throughout the life of the permit, despite repeated exceedances of numeric benchmarks and more egregious action level targets that very well might result in degraded water quality and harm to species. The four action levels constitute a continuous loop where the permittee is responsible for investigations, reports and completion of BMPs, and, in return, is permitted to degrade state surface waters.

Further, the Permittee may then request a waiver (S8D6) from having to even implement treatment BMPs if the facility is not discharging to a waterbody that is 303(d)-listed for the parameter of concern in the discharge. This does not seem to make sense. First, the permit should prevent future problems by controlling discharges known to contain pollutants, not just react to known problems. Second, many water bodies that should be on the 303(d) list for a given parameter are not on the list simply due to lack of monitoring.

We recommend that the department: 1) Revise Action Level 4 to require permittees to obtain an individual stormwater permit if *benchmarks* are exceeded a certain number of times; and 2) Delete the waiver to install treatment BMPs (S8D6).

- We are concerned that the consultant's (Herrera Environmental) water quality based risk analysis is based on dilution factors of the discharge in receiving waters, but the analysis did not characterize the volume or flow of permittees' discharges or receiving water flow. This makes it very difficult to know if dilution factors will be met.

The analysis states that given a dilution factor of 50, the probability of exceeding the copper criterion for water quality standards is fairly low (7% for chronic effects). But if the dilution factor is only 10, then the probability jumps to 36%. Without conducting an analysis of the contribution of permittees' discharges to receiving waters, we have no idea what dilution factors will be achieved; therefore, we have little idea of the full impact of discharges on receiving waters.

We urge the department to require permittees to characterize receiving waters and adjust BMPs accordingly to provide the appropriate level of treatment to ensure that receiving waters are not impaired by the discharges. This is consistent with current requirements for residential and commercial development, which requires stricter flow control if the discharge is to a stream than to a large river or Puget Sound. Residential, commercial and highway construction is also required to provide enhanced treatment if discharging from a multi-family building, a commercial shopping center, or a certain-sized roadway.

Other comments

- We are concerned that permittees are allowed to suspend sampling of discharges for the remainder of the permit following 8 samples (2 years of sampling) that are below

benchmark values (S4C2b). This suspension of sampling less than halfway through the 5-year permit presumes that discharges will remain under benchmark values for the remainder of the permit. We see no evidence supporting this presumption, and believe that curtailing sampling less than halfway through a permit cycle seems too brief. We recommend that the department revise this to 12 samples (3 years) so that all permittees will sample discharges for at least the majority of the permit cycle.

- We question why oil and grease is used as a parameter for benchmarks and action levels for discharges to non-303(d) listed waterbodies (S5A, Table 2). Oil and grease is generally recognized as an inferior means of measuring hydrocarbons in stormwater discharges. We recommend using TPH instead (or PAHs, although they are more costly). Further, we question why PAHs are listed as “not applicable” as a benchmark or action level for discharges to waterbodies on the 303(d) list or with a TMDL.
- We recommend adding “bioretention” to Appendix 2, Definitions as a treatment BMP. Bioretention is described and specifications provided in the *Low Impact Development Technical Guidance Manual for Puget Sound*. Bioretention is approved as an enhanced treatment BMP in the *Stormwater Management Manual for Western Washington* because it has proven highly effective at removing metals and hydrocarbons.
- We support provisions of S3, Stormwater Pollution Prevention Plan, including use of AKART and BMPs from Ecology manuals; training, inspections; and record keeping.
- We support several provisions of S4, Sampling, including wet season sampling provisions; requirements to sample at point of discharge from the site; and requirements to adherence to water quality and sediment management standards.